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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,398	07/19/2001	Milivoj Vujic	P24.870-USA	7782
7590	04/01/2004		EXAMINER	CHANG, VICTOR S
Irving Newman Synnestvedt & Lechner 2600 One Reading Center 1101 Market Street Philadelphia, PA 19107			ART UNIT	PAPER NUMBER
			1771	
			DATE MAILED: 04/01/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/830,398	VUJIC, MILIVOJ	
	Examiner	Art Unit	
	Victor S Chang	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 February 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,14-17,19,20,24-26 and 30-32 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4,14-17,19,20,24-26 and 30-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 2/17/2004. Applicants' amendments to claims 1, 16, 24, 25, 26 and 30, and newly added claims 31 and 32 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Claim Rejections - 35 USC § 112

4. Claims 1-4, 14-17, 19, 20, 24-26 and 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More particularly, it is noted that in amended independent claims 1 and 30, the newly added term "gap" appears to be vague and indefinite, because it is unclear to the Examiner whether the "gap" is an empty space or filled with contractable/expandable materials such as sponge or rubber. Clarification (such as a declaration) is requested.

Response to Amendment

5. Claims 1-4, 14-17, 19, 20, 24-26 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi (US 4287245) either individually, or in view of GB

2296749 for claims 14-15 and 17, substantially for the reasons set forth in section 4 of Paper No. 0814, together with the following additional observations.

It is noted that independent claim 1 has been substantially amended to clarify the structure of the contraction/expansion joints, in particular its radial relations to the cladding layer and surface of the component to be insulated, whereas claim 30 has been substantially amended to clarify the spatial relation between the joints.

With respect to Applicants' aforementioned amendments, the Examiner repeats (see section 4 of Paper No. 0814) that, in the absence of unexpected results, forming a gap intermittently along the length to accommodate spacers (contraction/expansion joints) due to temperature changes is old and well known, as evidenced by the state of the art Maybee (US 3557840). Maybee is directed to a preformed foam insulation structure (Abstract). In Fig. 5, Maybee shows that in order to provide for expansion and contraction of an insulated pipe 34, elastic spacers 38 may be included, which inherently requires a gap to accommodate the spacers. These elastic spacers may be constructed of any suitable material such as sponge rubber or plastic. Further, the elastic spacers 38 may be covered (column 5, lines 10-20). Additionally, it is also well known art that annular spacers are generally placed along a pipe to be insulated at suitable intervals with their diameter less than the outer diameter of the insulator module, as evidenced in Fig. 2 of Frye (US 5565652). As such, it would have been obvious to one of ordinary skill in the art to modify Kikuchi's heat insulator with the spacers of Maybee, which are inherently formed inside a gap, and intermittently space apart along the pipe to be insulated, as taught by Frye, motivated by the desire to

accommodate the dimensional expansion and contraction due to temperature changes.

It should be noted that Maybee discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

For newly added claims 31 and 32, although Maybee lack an express teaching of the relative depth of the gap, it is noted that Maybee expressly teaches that the elastic spacers 38 may be covered, as set forth above, in the absence of unexpected results, forming a gap with proper depth is believed to be an obvious optimization to one of ordinary skill in the art, motivated by the desire to accommodate a suitably sized spacer.

Finally, the examiner notes that if further prosecution, i.e., a CPA or RCE, is contemplated, the Examiner would like to strongly urge Applicant provide Declaration(s) (as mentioned during the interview on 12/5/2003) which focuses on the unique features of the gaps, so as to help to clarify the nonobviousness of the instant invention.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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1700

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